

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Daniel R. Wright et al.                      Art Unit 1617  
Serial No. 10/829,572  
Filed April 22, 2004  
Confirmation No. 6729  
For HERBICIDAL COMPOSITIONS CONTAINING GLYPHOSATE AND A  
PYRIDINE ANALOG  
Examiner Courtney A. Brown

June 23, 2011

**LETTER TO THE PATENT AND TRADEMARK OFFICE**

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

SIR:

In compliance with 37 C.F.R. § 1.114(c) and MPEP § 706.07(h), attached for re-submission in support of the instant Request for Continued Examination is Amendment F of May 23, 2011, entry of which was denied in the Advisory action of June 6, 2011.

**Supplementary Remarks**

In response to the note appended to the Advisory action, Applicants respectfully request reconsideration of the reasons stated by the Examiner for not finding Applicants' arguments persuasive with respect to the issue of *prima facie* obviousness.

It is respectfully submitted that the Examiner's interpretation of the Hacker, Brigance and Jimoh does not realistically capture the perspective of a person of ordinary skill in the art at the time the invention was made. On the

contrary, the cited references can be mined only by hindsight to reconstruct claimed combination.

Moreover, reconstruction of the claimed formulations from either Hacker or Jimoh requires hindsight at two levels.

### **Combination of Glyphosate and Pyridine Analog**

At the first level, it is necessary to select a combination of glyphosate and a pyridine analog herbicide out of the myriad of other combinations of herbicides that could be selected from the two lists in Hacker or the two lists in Jimoh. Hacker and Jimoh are generally comparable in this respect, and it is important to note that neither adds anything to the other so far as the combination claimed by Applicants is concerned. One can apply hindsight to Hacker, or hindsight to Jimoh, but even hindsight does not add any relevant connection from either to the other so far as the claimed combination of herbicides is concerned.

The known antagonism between pyridine analog herbicides and glyphosate adds a further increment of hindsight to any perception that the combination of such herbicides would have been selected by a skilled artisan from the teachings of Hacker or Jimoh.

In fact, the known antagonism adds a deterrent against the combination that must be selectively reconstructed from references if they are to meet the claims. This underscores an important reality explained in attached Amendment F, i.e., that disclosure in the references that a first herbicide can be drawn from one long list and combined with a second herbicide drawn from another long list would not be understood by one skilled in the art as teaching or suggesting the desirability, feasibility

or even possibility of every combination and permutation of herbicides from the two lists.

Turning to Brigance, and contrary to the Advisory action, there is simply no disclosure or suggestion in the latter reference of any combination of glyphosate and a pyridine analog herbicide. The Advisory action asserts that Brigance teaches that glyphosate can be formulated with picloram, but this is simply not the case. Glyphosate and picloram are merely listed along with fifteen other herbicides as herbicides that can be used in combination with the surfactant package that is the thrust of Brigance's disclosure. Given the large number of combinations and permutations among the long list of herbicides which Brigance lists, an excessive measure of hindsight is again required to perceive the combination which the Advisory action asserts.

#### **Ratio of Glyphosate to Pyridine Analog**

The requirement for hindsight is compounded by the absence from the references of any teaching of the relatively narrow range of glyphosate to pyridine analog herbicide that is required by the instant claims. The ranges of 7.6: to 20:1 in claim 29, 8:1 to 20:1 in claim 62, and 7:1 to 20:1 in claim 46 are not only much narrower than the nearly unlimited ranges taught in the references, but the claimed range has a major function that is not remotely suggested by the prior art. In fact, the prior art suggests no function at all but apparently chooses to disclose the wide ranges it does mainly for purposes of scope. In reality there is no teaching in the references of any ratio of glyphosate to a pyridine analog; only exceptionally broad essentially meaningless ranges of ratios of herbicides drawn from one lengthy list to herbicides drawn from another.

Neither the final Office action of February 23, 2011 nor the Advisory action of June 23, 2011 makes any serious attempt to suggest that one skilled in the art would find the claimed ranges obvious from the teachings of the cited references. Instead, the final Office action dismisses these ratios as reflecting mere "optimization" and the Advisory action follows suit:

"With regard to the claimed ratios of the herbicidal actives, the adjustment of particular conventional working conditions is deemed merely a matter of judicious selection and routine optimization which is well within the purview of a skilled artisan."

This is manifestly mistaken. As explained in further detail in the attached Amendment F (pp. 27-29), the ratio of glyphosate to pyridine analog was not a parameter known to be result-effective. Since the ratio was not known to be result-effective, there was no reason for one skilled in the art to have varied it with any expectation of obtaining a favorable result. On the contrary, given the known antagonism between glyphosate and pyridine analog herbicides, which is illustrated by the data in Hacker, one skilled in the art would have been deterred from preparing any formulations comprising these two classes of herbicides, much less experimented with ratio of the two herbicides with any expectation of a useful result.

In distinct departure from the references, Applicants chose to investigate combinations of glyphosate and pyridine analog, and in doing so identified a relatively narrow range of ratios of these herbicides where the known antagonism is avoided. This is not mere optimization of a variable known to be result-effective but rather a difference in kind, i.e., the identification of a variable that, in the relatively narrow ranges that are claimed, provides a result contrary to the

teachings of the prior art, thus enabling salutary combinations of herbicides that the prior art would have suggested to be incompatible.

### **Conclusion**

In view of the explanations set forth in detail in attached Amendment F, as supplemented by the brief remarks addressing the Advisory action as set forth above, reconsideration, withdrawal of the rejections, and early allowance of all claims is respectfully solicited.

### **Request for Interview**

Applicants' undersigned attorney respectfully requests scheduling of a telephone interview to further discuss the claims, the references, and any questions or disagreements the Examiner may continue to have with the explanations offered in Amendment F and in this supplemental response.

Assuming that prior art issues are resolved in the interview, and that the nature of allowable claims sequence of allowance supports provisional double patenting rejections, Applicants will be prepared to submit any terminal disclaimer that may be necessary in order to remove this as an obstacle to allowance.

Respectfully submitted,

/John K. Roedel, Jr./

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